

RECEIVED

AUG 23 2001

TECH CENTER 1600/2900

1644

TECH CENTER 1600/2900

OCT 09 2001

RECEIVED

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/829,549A

DATE: 07/24/2001

TIME: 10:26:58

Input Set : A:\Umo152-1.txt

Output Set: N:\CRF3\07242001\I829549A.raw

3 <110> APPLICANT: The Curators of the University of Missouri  
 5 <120> TITLE OF INVENTION: PHAGE DISPLAY SELECTION OF ANTI FUNGAL PEPTIDES  
 7 <130> FILE REFERENCE: UMO 1521.1  
 9 <140> CURRENT APPLICATION NUMBER: US' 09/829,549A  
 10 <141> CURRENT FILING DATE: 2001-04-10  
 12 <150> PRIOR APPLICATION NUMBER: US 60/195,785  
 13 <151> PRIOR FILING DATE: 2000-04-10  
 15 <160> NUMBER OF SEQ ID NOS: 48  
 17 <170> SOFTWARE: PatentIn version 3.0  
 19 <210> SEQ ID NO: 1  
 20 <211> LENGTH: 33  
 21 <212> TYPE: PRT  
 22 <213> ORGANISM: Type 88 filamentous bacteriophage  
 24 <220> FEATURE:  
 25 <221> NAME/KEY: VARIANT  
 26 <222> LOCATION: (9)..(23)  
 27 <223> OTHER INFORMATION: x=any amino acid encoded by the codon NNK  
 30 <400> SEQUENCE: 1

W--> 32 Leu Val Pro Met Leu Ser Phe Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 33 1 5 10 15  
 W--> 35 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro Ala Glu Gly Asp Asp Pro Ala Lys  
 36 20 25 30  
 38 Ala

41 <210> SEQ ID NO: 2  
 42 <211> LENGTH: 20  
 43 <212> TYPE: DNA  
 44 <213> ORGANISM: Artificial Sequence  
 46 <220> FEATURE:  
 47 <221> NAME/KEY: misc\_feature  
 48 <222> LOCATION: (1)..(20)  
 49 <223> OTHER INFORMATION: Primer  
 52 <400> SEQUENCE: 2  
 53 ggagccttta attgtatcgg  
 56 <210> SEQ ID NO: 3  
 57 <211> LENGTH: 19  
 58 <212> TYPE: DNA  
 59 <213> ORGANISM: Artificial Sequence  
 61 <220> FEATURE:  
 62 <221> NAME/KEY: misc\_feature  
 63 <222> LOCATION: (1)..(19)  
 64 <223> OTHER INFORMATION: Primer  
 67 <400> SEQUENCE: 3  
 68 agtagcagaa gcctgaaga  
 71 <210> SEQ ID NO: 4  
 72 <211> LENGTH: 9  
 73 <212> TYPE: PRT  
 74 <213> ORGANISM: Artificial Sequence

20

19

ENTERED

0590  
7/31

## RAW SEQUENCE LISTING

DATE: 07/24/2001

PATENT APPLICATION: US/09/829,549A

TIME: 10:26:58

Input Set : A:\Umo152-1.txt

Output Set: N:\CRF3\07242001\I829549A.raw

76 <220> FEATURE:  
77 <221> NAME/KEY: DOMAIN  
78 <222> LOCATION: (1)..(9)  
79 <223> OTHER INFORMATION: Random peptide insert  
82 <400> SEQUENCE: 4  
84 Ala Ala Pro Asp Leu Gln Asp Ala Met  
85 1 5  
87 <210> SEQ ID NO: 5  
88 <211> LENGTH: 9  
89 <212> TYPE: PRT  
90 <213> ORGANISM: Artificial Sequence  
92 <220> FEATURE:  
93 <221> NAME/KEY: DOMAIN  
94 <222> LOCATION: (1)..(9)  
95 <223> OTHER INFORMATION: Random peptide insert  
98 <400> SEQUENCE: 5  
100 Ala Asp Arg Leu Asn Ser Asp Ala Gly  
101 1 5  
103 <210> SEQ ID NO: 6  
104 <211> LENGTH: 9  
105 <212> TYPE: PRT  
106 <213> ORGANISM: Artificial Sequence  
108 <220> FEATURE:  
109 <221> NAME/KEY: DOMAIN  
110 <222> LOCATION: (1)..(9)  
111 <223> OTHER INFORMATION: Random peptide insert  
114 <400> SEQUENCE: 6  
116 Ala Asp Arg Pro Ser Thr Thr Ser Leu  
117 1 5  
119 <210> SEQ ID NO: 7  
120 <211> LENGTH: 9  
121 <212> TYPE: PRT  
122 <213> ORGANISM: Artificial Sequence  
124 <220> FEATURE:  
125 <221> NAME/KEY: DOMAIN  
126 <222> LOCATION: (1)..(9)  
127 <223> OTHER INFORMATION: Random peptide insert  
130 <400> SEQUENCE: 7  
132 Ala Asp Pro Pro Arg Thr Val Ser Thr  
133 1 5  
135 <210> SEQ ID NO: 8  
136 <211> LENGTH: 9  
137 <212> TYPE: PRT  
138 <213> ORGANISM: Artificial Sequence  
140 <220> FEATURE:  
141 <221> NAME/KEY: DOMAIN  
142 <222> LOCATION: (1)..(9)  
143 <223> OTHER INFORMATION: Random peptide insert  
146 <400> SEQUENCE: 8

## RAW SEQUENCE LISTING

DATE: 07/24/2001

PATENT APPLICATION: US/09/829,549A

TIME: 10:26:59

Input Set : A:\Umo152-1.txt

Output Set: N:\CRF3\07242001\I829549A.raw

148 Ala Asp Arg Pro Ser Met Ser Pro Thr  
149 1 5  
151 <210> SEQ ID NO: 9  
152 <211> LENGTH: 9  
153 <212> TYPE: PRT  
154 <213> ORGANISM: Artificial Sequence  
156 <220> FEATURE:  
157 <221> NAME/KEY: DOMAIN  
158 <222> LOCATION: (1)..(9)  
159 <223> OTHER INFORMATION: Random peptide insert  
162 <400> SEQUENCE: 9  
164 Ala Asp Arg Thr Ser Asn Ala Ser Thr  
165 1 5  
167 <210> SEQ ID NO: 10  
168 <211> LENGTH: 9  
169 <212> TYPE: PRT  
170 <213> ORGANISM: Artificial Sequence  
172 <220> FEATURE:  
173 <221> NAME/KEY: DOMAIN  
174 <222> LOCATION: (1)..(9)  
175 <223> OTHER INFORMATION: Random peptide insert  
178 <400> SEQUENCE: 10  
180 Ala Asp Lys Ser Tyr Ile Pro Ser Ser  
181 1 5  
183 <210> SEQ ID NO: 11  
184 <211> LENGTH: 9  
185 <212> TYPE: PRT  
186 <213> ORGANISM: Artificial Sequence  
188 <220> FEATURE:  
189 <221> NAME/KEY: DOMAIN  
190 <222> LOCATION: (1)..(9)  
191 <223> OTHER INFORMATION: Random peptide insert  
194 <400> SEQUENCE: 11  
196 Ala Val Arg Asn Pro Ser His His Ser  
197 1 5  
199 <210> SEQ ID NO: 12  
200 <211> LENGTH: 9  
201 <212> TYPE: PRT  
202 <213> ORGANISM: Artificial Sequence  
204 <220> FEATURE:  
205 <221> NAME/KEY: DOMAIN  
206 <222> LOCATION: (1)..(9)  
207 <223> OTHER INFORMATION: Random peptide insert  
210 <400> SEQUENCE: 12  
212 Ala Asp Pro Thr Pro Arg Gly His Ser  
213 1 5  
215 <210> SEQ ID NO: 13  
216 <211> LENGTH: 9  
217 <212> TYPE: PRT

## RAW SEQUENCE LISTING

DATE: 07/24/2001

PATENT APPLICATION: US/09/829,549A

TIME: 10:26:59

Input Set : A:\Umol52-1.txt

Output Set: N:\CRF3\07242001\I829549A.raw

218 <213> ORGANISM: Artificial Sequence  
220 <220> FEATURE:  
221 <221> NAME/KEY: DOMAIN  
222 <222> LOCATION: (1)..(9)  
223 <223> OTHER INFORMATION: Random peptide insert  
226 <400> SEQUENCE: 13  
228 Ala Asp Pro Thr Arg Gln Pro His Ser  
229 1 5  
231 <210> SEQ ID NO: 14  
232 <211> LENGTH: 9  
233 <212> TYPE: PRT  
234 <213> ORGANISM: Artificial Sequence  
236 <220> FEATURE:  
237 <221> NAME/KEY: DOMAIN  
238 <222> LOCATION: (1)..(9)  
239 <223> OTHER INFORMATION: Random peptide insert  
242 <400> SEQUENCE: 14  
244 Ala Glu His Gln Asn Ser Ala Gly Pro  
245 1 5  
247 <210> SEQ ID NO: 15  
248 <211> LENGTH: 10  
249 <212> TYPE: PRT  
250 <213> ORGANISM: Artificial Sequence  
252 <220> FEATURE:  
253 <221> NAME/KEY: DOMAIN  
254 <222> LOCATION: (1)..(10)  
255 <223> OTHER INFORMATION: Random peptide insert  
258 <400> SEQUENCE: 15  
260 Ala Asp Ala Arg Ser Ala Gly Ala Ile Ser  
261 1 5 10  
263 <210> SEQ ID NO: 16  
264 <211> LENGTH: 9  
265 <212> TYPE: PRT  
266 <213> ORGANISM: Artificial Sequence  
268 <220> FEATURE:  
269 <221> NAME/KEY: DOMAIN  
270 <222> LOCATION: (1)..(9)  
271 <223> OTHER INFORMATION: Random peptide insert  
274 <400> SEQUENCE: 16  
276 Ala Asp Ser Lys Asn Ala Gly Pro Met  
277 1 5  
279 <210> SEQ ID NO: 17  
280 <211> LENGTH: 9  
281 <212> TYPE: PRT  
282 <213> ORGANISM: Artificial Sequence  
284 <220> FEATURE:  
285 <221> NAME/KEY: DOMAIN  
286 <222> LOCATION: (1)..(9)  
287 <223> OTHER INFORMATION: Random peptide insert

## RAW SEQUENCE LISTING

DATE: 07/24/2001

PATENT APPLICATION: US/09/829,549A

TIME: 10:26:59

Input Set : A:\Umol52-1.txt

Output Set: N:\CRF3\07242001\I829549A.raw

290 <400> SEQUENCE: 17  
292 Ala Glu Thr Lys Phe Ser Gly Ser Ala  
293 1 5  
295 <210> SEQ ID NO: 18  
296 <211> LENGTH: 9  
297 <212> TYPE: PRT  
298 <213> ORGANISM: Artificial Sequence  
300 <220> FEATURE:  
301 <221> NAME/KEY: DOMAIN  
302 <222> LOCATION: (1)..(9)  
303 <223> OTHER INFORMATION: Random peptide insert  
306 <400> SEQUENCE: 18  
308 Ala Asp Pro Lys Gly Ser Gly Val Thr  
309 1 5  
311 <210> SEQ ID NO: 19  
312 <211> LENGTH: 9  
313 <212> TYPE: PRT  
314 <213> ORGANISM: Artificial Sequence  
316 <220> FEATURE:  
317 <221> NAME/KEY: DOMAIN  
318 <222> LOCATION: (1)..(9)  
319 <223> OTHER INFORMATION: Random peptide insert  
322 <400> SEQUENCE: 19  
324 Ala Gly Leu Thr Ser Pro Asn Asp Met  
325 1 5  
327 <210> SEQ ID NO: 20  
328 <211> LENGTH: 9  
329 <212> TYPE: PRT  
330 <213> ORGANISM: Artificial Sequence  
332 <220> FEATURE:  
333 <221> NAME/KEY: DOMAIN  
334 <222> LOCATION: (1)..(9)  
335 <223> OTHER INFORMATION: Random peptide insert  
338 <400> SEQUENCE: 20  
340 Ala Asp Ile Thr Asp Pro Met Gly Ala  
341 1 5  
343 <210> SEQ ID NO: 21  
344 <211> LENGTH: 9  
345 <212> TYPE: PRT  
346 <213> ORGANISM: Artificial Sequence  
348 <220> FEATURE:  
349 <221> NAME/KEY: DOMAIN  
350 <222> LOCATION: (1)..(9)  
351 <223> OTHER INFORMATION: Random peptide insert  
354 <400> SEQUENCE: 21  
356 Ala Val Gly Thr His Thr Pro Asp Ser  
357 1 5  
359 <210> SEQ ID NO: 22  
360 <211> LENGTH: 9

→ Use of n and/or Xaa has been detected in the Sequence Listing.  
Review the Sequence Listing to insure a corresponding  
explanation is presented in the <220> to <223> fields of  
each sequence using n or Xaa.

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/829,549A

DATE: 07/24/2001

TIME: 10:27:00

Input Set : A:\Umol52-1.txt

Output Set: N:\CRF3\07242001\I829549A.raw

L:32 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:35 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:442 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26  
L:480 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28  
L:550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32  
L:572 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33  
L:594 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34  
L:632 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36  
L:660 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37  
L:730 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41